

WHAT IS CLAIMED IS:

1. A cured tobacco comprising a genetic modification, a reduced amount of nicotine, and a collective content of N'-nitrosonornicotine (NNN), N'-nitrosoanatabine (NAT), N'-nitrosoanabasine (NAB), 4-(N-nitrosomethylamino)-1-(3-pyridyl)-1-butanone (NNK) of less than about 0.5 µg/g.
2. The cured tobacco of Claim 1, wherein the collective content of NNN, NAT, NAB, and NNK is less than about 0.4 µg/g.
3. The cured tobacco of Claim 1, wherein the collective content of NNN, NAT, NAB, and NNK is less than about 0.2 µg/g.
4. The cured tobacco of Claim 1, wherein said cured tobacco is selected from the group consisting of Burley, Flue, or Oriental.
5. The cured tobacco of Claim 4, wherein said cured tobacco is Burley.
6. The cured tobacco of Claim 4, wherein said cured tobacco is Flue.
7. The cured tobacco of Claim 1, wherein said tobacco comprises an exogenous quinolate phosphoribosyl transferase (QPTase) gene or a fragment thereof at least 13 nucleotides in length.
8. The cured tobacco of Claim 1, wherein the amount of nicotine is less than about 0.5 mg/g.
9. The cured tobacco of Claim 1, wherein the amount of nicotine is less than about 0.1 mg/g.
10. A tobacco product comprising the cured tobacco of Claim 1.
11. A blended tobacco product comprising the cured tobacco of Claim 1.
12. A tobacco use cessation kit comprising the cured tobacco of Claim 1.
13. The tobacco product of Claim 10, wherein said tobacco product is selected from the group consisting of cigarettes, cigars, pipe tobacco, snuff, chewing tobacco, gum, and lozenges.
14. The blended tobacco product of Claim 11, wherein said tobacco product is selected from the group consisting of cigarettes, cigars, pipe tobacco, snuff, chewing tobacco, gum, and lozenges.

15. A method of reducing the carcinogenic potential of a tobacco product comprising providing the cured tobacco of Claim 1 and preparing a tobacco product from said cured tobacco, whereby the carcinogenic potential of said tobacco product is thereby reduced.

16. A method of making the tobacco product of Claim 10, comprising providing the cured tobacco of Claim 1 and preparing said tobacco product from said cured tobacco.

17. A method of making the blended tobacco product of Claim 11, comprising providing the cured tobacco of Claim 1 and preparing said tobacco product from said cured tobacco.

18. A method of reducing the amount of a TSNA or a TSNA metabolite in a human that uses tobacco, comprising providing said human the tobacco product of Claim 10.

19. A method of reducing the carcinogenic potential of side stream or main stream tobacco smoke in a human exposed to said side stream or main stream tobacco smoke, comprising providing the cured tobacco of Claim 1 in a product that undergoes pyrolysis, wherein pyrolysis of said product results in side stream or main stream smoke comprising a reduced amount of TSNAs.

20. An improved tobacco product that contains Burley tobacco, wherein said improvement comprises a genetically modified Burley tobacco comprising a collective content of NNN, NAT, NAB, and NNK that is less than about 0.2 $\mu\text{g/g}$ and an amount of nicotine that is less than about 0.5 mg/g.